

## FUEL CELL AND VAPOR PERMEATION MEMBRANE USED FOR THIS

**Patent number:** JP2002117878  
**Publication date:** 2002-04-19  
**Inventor:** OMORI AKIHIRO; KOIZUMI YOSUKE; HAMANAKA KATSUHIKO  
**Applicant:** ASAHI CHEMICAL CORP  
**Classification:**  
- **international:** H01M8/04; H01M8/10  
- **european:**  
**Application number:** JP20000306279 20001005  
**Priority number(s):** JP20000306279 20001005

[Report a data error here](#)

### Abstract of JP2002117878

**PROBLEM TO BE SOLVED:** To obtain sufficient humidifying function, without changing oxygen concentration of the air supplied to a battery part in a humidifying part of a fuel cell. **SOLUTION:** The fuel cell is equipped with a battery part 1, which performs a battery reaction, and a humidifying part 2 of the air-side. The humidifying part 2 comprises a flow path 21 for materials gas, into which materials gas is introduced, a flow path 22 for discharge gas, into which discharge gas from the battery part 1 is introduced, and a vapor permeation membrane 23 which separates these flow ways. As this vapor permeation membrane 23, a porosity film, which has a permeable, resin layer of ion-exchange resin of perfluorosulfonic acid system. The film makes only water vapor permeate by high permeation capability, and cannot make gas other than water vapor permeate easily.

